Industrial Specialties

ANTISOL™

Polyanionic Cellulose (PAC) Polymers for Drilling Fluids

ANTISOL™ Polyanionic Cellulose (PAC) Polymers are high purity (>98%) carboxymethylcellulose additives and serve as the industry standard to modify flow and filtration properties in water based drilling fluids.

Drilling fluids are essential parts of rotary drillings systems by insuring a high rate of penetration and good bore stability. The fluid is pumped down the drill pipe and returns to the surface via the annulus loaded with solids. The solids are removed by various measures and the drilling fluid is recirculated.

If straight water is used, the flow properties and debris carrying capacity of the drilling fluid depend on the geological structure. This can make the desired control of the drilling fluids' performance difficult.

With its tailored properties, ANTISOL™ can help to overcome these disadvantages. ANTISOL™ helps to adapt the properties of the drilling fluids to the highly differing demands resulting from the formation encountered during drilling.

The use of ANTISOL™ in drilling fluids offers the following benefits:

- Effective dispersion of clay particles
- Protection of clay particles against detrimental effects of electrolytes
- Retention of water of the drilling fluid which could penetrate into the formation
- Shale inhibition that prevents swelling of shale formations and the dispersion of the shale in the drilling fluid

ANTISOL™ products for drilling fluids and key properties

ANTISOL™ FL 30000	**Extremely high viscosity** • Fluid loss agent with very high yield • Excellent viscosifier • Shale inhibiting properties
ANTISOL™ FL 100	**Low viscosity** • Fluid loss agent with high yield and ideal rheological properties for low filtrate values
ANTISOL™ FL 30	**Extremely low viscosity** • Fluid loss agent for extremely low filtration values • Negligible effect on viscosity
ANTISOL™ FL 10 / PAC ULV	**Ultra low viscosity** • Fluid loss agent with no negative influence on the plastic viscosity

Drilling fluids have the following essential functions:

- Removal of the cuttings – **"thixotropic effect"**
- Stabilization of the bore hole – **"thin and flexible filter cake"**
- Cooling and lubrication – **"friction reduction"**
- Control of formation pressure – **"specific gravity fluids"**

For more information contact us:

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